



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Daniel J. Pusiol

Application No.: 10/713,344

Confirmation No.: 9848

Filed: November 14, 2003

For: METHOD, SENSOR ELEMENTS AND
ARRANGEMENT FOR THE DETECTION
AND/OR ANALYSIS OF COMPOUNDS
SIMULTANEOUSLY EXHIBITING NUCLEAR
QUADRUPOLAR RESONANCE AND
NUCLEAR MAGNETIC RESONANCE, OR
DOUBLE NUCLEAR QUADRUPOLAR
RESONANCE

Group: 1743

Examiner: Not Yet Known

Our File: GBR-PT003

Date: April 23, 2004

INFORMATION DISCLOSURE STATEMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to Applicant's Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicant wishes to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Copies of the cited documents are enclosed.

Pursuant to Pre-Official Gazette Notice signed July 11, 2003 waiving the requirements under 37 C.F.R. § 1.98(a)(2)(i) for applications filed after June 30, 2003,

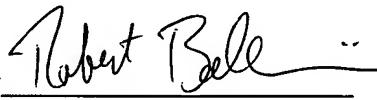
Applicant: Daniel J. Pusiol
Application No.: 10/713,344

copies of the cited U.S. documents have not been included. Copies of all other cited references are enclosed.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

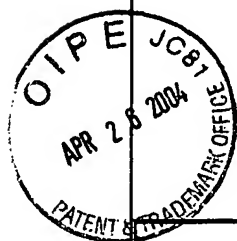
Respectfully submitted,

Daniel J. Pusiol

By 
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Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

RJB/pp
Enclosures (17)



FORM PTO-1449		ATTY. DOCKET NO. GBR-PT003	SERIAL NO. 10713,344
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Daniel J. Pusiol	
		FILING DATE November 14, 2003	GROUP 1743

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AU	5	2	3	3	3	0	0	08/1993	Buess et al.			
	AV	6	0	5	4	8	5	6	04/2000	Garroway et al.			
	AW	6	1	9	4	8	9	8	02/2001	Magnuson et al.			
	AX	6	1	6	6	5	4	1	12/2000	Smith et al.			
	AY	6	1	0	4	1	9	0	08/2000	Buess et al.			
	AZ	6	1	0	0	6	9	4	08/2000	Wong			

FOREIGN PATENT DOCUMENTS

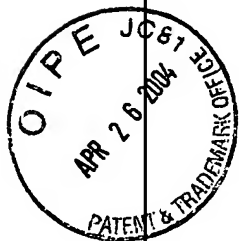
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	BA	R. Kimmich, "NMR Tomography Diffusometry Relaxometry", Springer (1997)
	BB	J. Perlo, "Imágenes Codificadas Espacialmente Por RMNY Detectadas Por RCN", Final Paper for the Physics Degree, College of Mathematics, Astronomy and Physics, Universidad Nacional de Córdoba, Argentina (2000)
	BC	C. R. Rodríguez, "Estudio De La Dinamica Lenta Y La Estructura En Cristales Liquidos Liotropicos Micelares, Mediante RMN", Doctorate Thesis, College of Mathematics, Astronomy and Physics, Universidad Nacional de Córdoba, Argentina (2000)
	BD	E. Rommel, K. Mischker, G. Osswald, K.H. Schweikert and F. Noack, "A Powerful NMR Field-Cycling Device Using GTOs and MOSFETs for Relaxation Dispersion and Zero-Field Studies, J. Magn. Reson. 70, 219-234 (1986)
	BE	D. Tomasi, E.C. Caparelli, H. Panepucci and B. Foerster, "Fast Optimization of a Biplanar Gradient Coil Set", J. Magn. Reson. 140, 325-339 (1999)
	BF	E.C. Caparelli, D. Tomasi and H. Panepucci, "Shielded Biplanar Gradient Coil Design", J. Magn. Reson. 9, 725-731 (1999)
	BG	Y.K. Lee, H. Robert and D.K. Lathrop, "Circular Polarization Excitation and Detection in ¹⁴ N NQR", J. Magn. Reson. 148, 355-362 (2001)
	BH	A.F. Privalov, S.V. Dvinskikh and H.-M. Vieth, "Coil Design for Large-Volume High-B ₁ Homogeneity for Solid-State NMR Applications", J. Magn. Reson. A 123, 157-160 (1996)

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.
GBR-PT003SERIAL NO.
10/713,344APPLICANT
Daniel J. PusiolFILING DATE
November 14, 2003GROUP
1743

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5	2	2	9	7	2	2	07/1993	Rommel et al.			
	AB	5	2	0	6	5	9	2	04/1993	Buess et al.			
	AC	4	8	8	7	0	3	4	12/1989	Smith et al.			
	AD	6	5	2	2	1	3	5	02/2003	Miller et al.			
	AE	6	1	2	7	8	2	4	10/2000	Sydney Smith et al.			
	AF	5	8	0	4	9	6	7	09/1998	Miller et al.			
	AG	5	6	0	8	3	2	1	03/1997	Garroway et al.			
	AH	5	5	9	2	0	8	3	01/1997	Magnuson et al.			
	AI	5	5	8	3	4	3	7	12/1996	Smith et al.			
	AJ	5	4	9	1	4	1	4	02/1996	Smith et al.			
	AK	5	4	5	7	3	8	5	10/1995	Sydney et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	AL	WO	98	0	9	1	7	8	03/1998	WO				
	AM	RU	21	90	84	2	C	1	10/2002	RU			X*	
	AN	RU	21	84	36	8	C	1	06/2002	RU			X*	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AO	V.S. Grechishkin, "NQR Device for Detecting Plastic Explosives, Mines and Drugs", Applied Physics, Vol. A55, pp. 505-507 (1992)
AP	B. Herzog and E.L. Hahn, "Transient Nuclear Induction and Double Nuclear-Resonance in Solids", Phys. Rev. Vol. 103, No. 1, pp. 148-166 (1956)
AQ	J. Perlo, F. Casanova, H. Robert and D.J. Pusiol, "Solid State Proton Imaging Detected by Quadrupole Resonance", J. Magn. Reson. 150, 132-136 (2001)
AR	E. Rommel, P. Nickel, R. Kimmich, and D. Pusiol, "Rotating-Frame NQR Imaging", J. Magn. Reson. 91, 630-636 (1991)
AS	V.S. Grechishkin, "Application of Multipulse Sequences in Remote NQR", Appl. Phys. A58, pp. 63-65 (1994).
AT	G.V. Mozjoukhine, "The Frequency Offset Effects of NQR of Spin $I = 1$ for Remote Detection", Z. Naturforsch. 57 a, pp. 297-303 (2002).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. X* Abstract Only